<u>WHAT IS CLAIMED IS</u>:

1   1. A system for permitting interaction with media data analysis and media

2   representation generation, the system comprising:

3   a user interface for permitting a user to control the media content analysis and

4   media representation generation; and

5   a media analysis software module for analyzing features of the media content, the

6   media analysis software module being communicatively coupled to the

7   user interface to receive media content analysis instructions.

1   2. The system of claim 1, the media analysis software module further comprises

2   content recognition software for recognizing features in media content.

1   3. The system of claim 1, further comprising processing logic for controlling

2   display of a user interface.

1   4. The system of claim 1, further comprising processing logic for controlling the

2   generation of a media representation.

1   5. The system of claim 1, further comprising hardware for writing a media

2   representation in digital format.

1   6. The system of claim 5, further comprising a storage medium for storing media

2   representations written in digital format.

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1   7. The system of claim 1, wherein the media representation is generated in paper

2   format.

1   8. The system of claim 7, wherein the paper format includes at least one user-

2   selectable identifier allowing a user to access and control media content.

1   9. The system of claim 8, wherein the at least one user-selectable identifier

.2   comprises at least one barcode printed on the media representation.

1   10. The system of claim 8, wherein the at least one user-selectable identifier

2   further comprises at least one play identifier that can be selected to play an associated

3   media content.

1   11. The system of claim 1, further comprising a data structure for representing

2   transformation of media content.

1   12. The system of claim 1, further comprising a communication monitoring

2   module for monitoring communication between the components of the system, wherein

3   the communication monitoring module forwards requests for information and replies to

4   requests among system components.

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1   13. The system of claim 1, wherein the user interface further comprises a

2   selection menu for allowing a user to select feature analysis to be performed on media

3   content.

1   14. The system of claim 1, wherein the user interface further comprises a field for

2   setting a threshold on confidence values associated with results of the media content

3   analysis.

1   15. The system of claim 1, wherein the user interface further comprises at least

2   one field for managing and modifying display of media information on a media

3   representation.

1   16. The system of claim 1, wherein the user interface further comprises a preview

2   field for previewing active media frames within selected media content.

1   17. The system of claim 1, wherein the user interface further comprises a preview

2   field for previewing the media representation being generated.

1   18. The system of claim 1, wherein the user interface further comprises at least

2   one content selection field for selecting segments of media content from at least one

3   source to be displayed in a media representation.

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1   19. The system of claim 18, wherein the content selection field further comprises

2 a selector that a user can slide along the content selection field in order to select segments

3 to be displayed in a media representation.

1   20. The system of claim 18, wherein the content selection field further comprises

2 a graphical illustration of media content from which a user can view media content and

3 select segments of media content.

1   21. The system of claim 20, wherein the graphical illustration of media content

2 further comprises an audio waveform timeline displaying audio content.

1   22. The system of claim 20, wherein the graphical illustration of media content

2 further comprises a video timeline displaying video frames extracted from video content.

1   23. The system of claim 20, wherein the graphical illustration of media content

2 further comprises a video timeline displaying text extracted from video content.

1   24. The system of claim 18, wherein the content selection field further comprises

2 a field for displaying the results of media content analysis, the results being displayed as

3 defined segments along a timeline.

1   25. The system of claim 1, further comprising an output device driver module for

2 driving the media content analysis and the media representation generation, the output

3   device driver module being communicatively coupled to the user interface to receive user

4   instructions.

1   26. The system of claim 25, further comprising an augmented output device for

2   generating a media representation, the augmented output device being communicatively

3   coupled to the media analysis software module to receive transformed media data, the

4   augmented output device being communicatively coupled to the output device driver

5   module to receive instructions for media representation generation.

1   27. A method for permitting interaction with media data analysis and media

2   representation generation, the method comprising:

3   interacting with an interface to control the media data analysis and media

4   representation generation;

5   analyzing features of media data for media representation generation;

6   driving the media data analysis; and

7   driving the media representation generation, by receiving instructions and sending

8   instructions regarding media representation parameters.

1   28. The method of claim 27, further comprising generating a media

2   representation.

1   29. The method of claim 27, wherein analyzing features of media data further

2   comprises performing speech recognition on the media data.

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1   30. The method of claim 27, wherein analyzing features of media data further

2   comprises performing optical character recognition on the media data.

1   31. The method of claim 27, wherein analyzing features of media data further

2   comprises performing face recognition on the media data.

1   32. The method of claim 27, wherein analyzing features of media data further

2   comprises performing speech recognition on the media data.

1   33. The method of claim 27, wherein analyzing features of media data further

2   comprises performing speaker detection on the media data.

1   34. The method of claim 27, wherein analyzing features of media data further

2   comprises performing face detection on the media data.

1   35. The method of claim 27, wherein analyzing features of media data further

2   comprises performing event detection on the media data.

1   36. The method of claim 27, further comprising adding a print function to a

2   media rendering application for printing a media representation.

1   37. The method of claim 27, storing media content on a storage medium that is

2   accessible to augmented output device.

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1   38. The method of claim 27, wherein interacting with an interface to control the

2   media data analysis and the media representation generation further comprises using a

3   user interface to display media content formatting options to a user.

1   39. The method of claim 27, wherein interacting with an interface to control the

2   media content analysis and the media representation generation further comprises

3   selecting an analysis technique to be applied to media content, wherein the analysis

4   technique recognizes defined features in the media content.

1   40. The method of claim 27, wherein interacting with an interface to control the

2   media data analysis and the media representation generation further comprises selecting a

3   threshold value to be applied to confidence levels associated with defined features that

4   are recognized in the media content.

1   41. The method of claim 27, wherein interacting with an interface to control the

2   media data analysis and the media representation generation further comprises

3   previewing the media representation being generated in a preview field that displays the

4   media representation as it is being created.

1   42. The method of claim 27, wherein interacting with an interface to control the

2   media data analysis and the media representation generation further comprises selecting

3   an update field after modifying content on a user interface to update the preview field.

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1   43. The method of claim 27, wherein interacting with an interface to control the

2   media data analysis and the media representation generation further comprises selecting

3   segments of media content in a field of the user interface by sliding a selector along a

4   timeline displaying media content

1   44. The method of claim 27, wherein interacting with an interface to control the

2   media data analysis and the media representation generation further comprises selecting a

3   play option on the user interface to play media content.

1   45. The method of claim 27, further comprising selecting a print option on a

2   media rendering application, wherein the user interface appears and the user selects

3   parameters for transformation of media content.

1   46. The method of claim 27, further comprising selecting a print option on media

2   rendering application, wherein the user interface appears in which default media content

3   transformation has been performed and the media representation is shown in a preview

4   field of the user interface.

1   47. The method of claim 27, wherein generating a printable multimedia

2   representation further comprises printing a media representation in a paper-based format.

1   48. The method of claim 47, further comprising selecting a user-selectable

2   identifier on the paper-based format to play the associated media content.

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